

FIG. 1 is a block diagram of a cable network architecture. The diagram shows a central cable station (120) connected to the Internet (110) via a Gigabit Router (124) and a Switch (125). The central cable station is also connected to three Optical Transport Platforms (130, 135, 140). These platforms are connected to Distribution Hubs (141, 140, 150) which contain CMTS (Cable Modem Termination System) units. The Distribution Hubs are connected to Fiber Nodes (151, 155, 157). The Fiber Nodes are connected to Cable Modems (160, 165, 169) which are then connected to Settop Boxes - TV (170, 175, 179) and PCs (187, 184, 189). The network also includes a Content Provider (100) with a Web Server (www.warner.com) and a Coaxial Cable (159) connecting the Cable Modems to the Settop Boxes and PCs. The network is labeled as Primary Fiber OC 48 (135) and Secondary Fiber (Analog) (156).

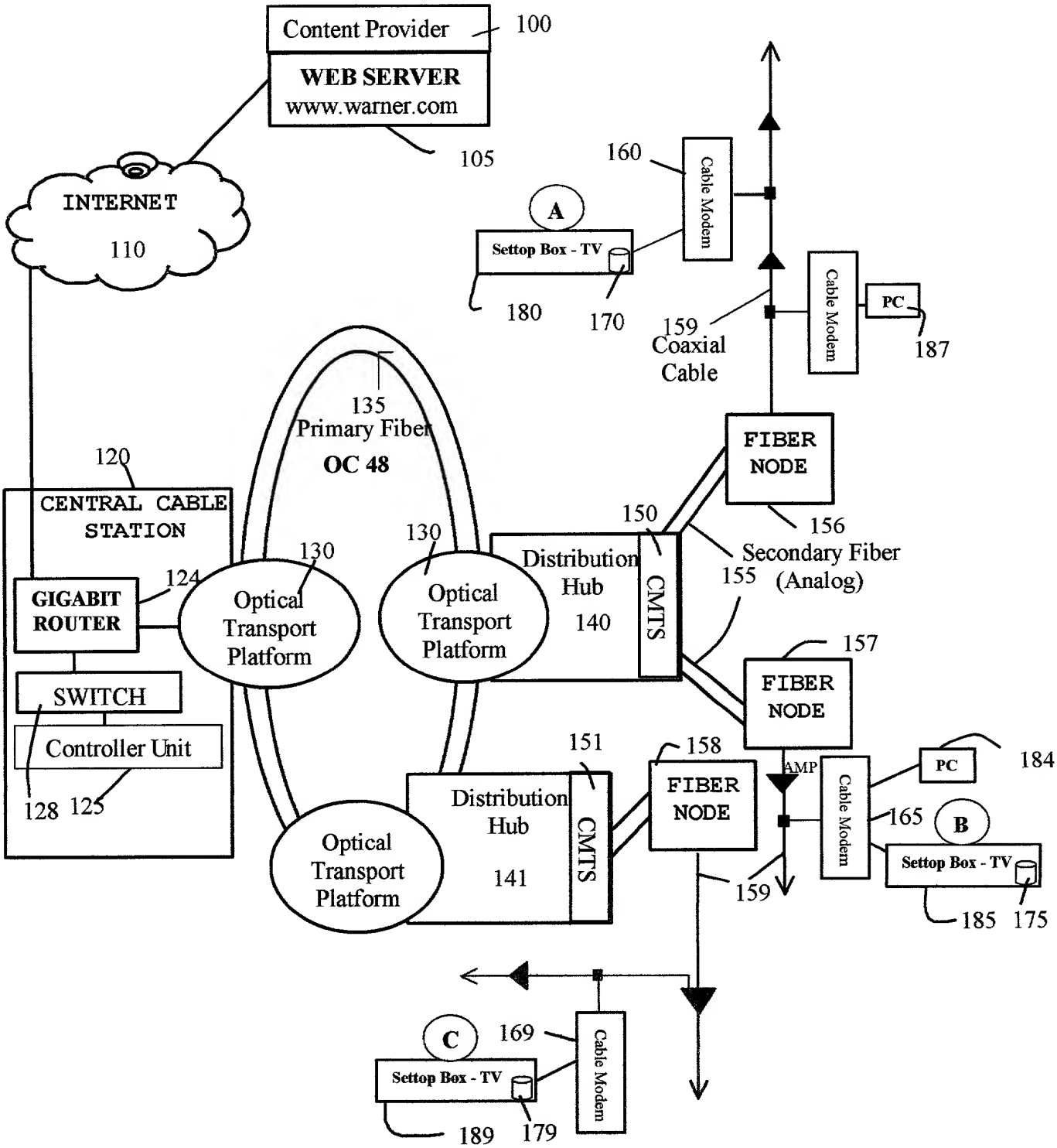


FIG. 1

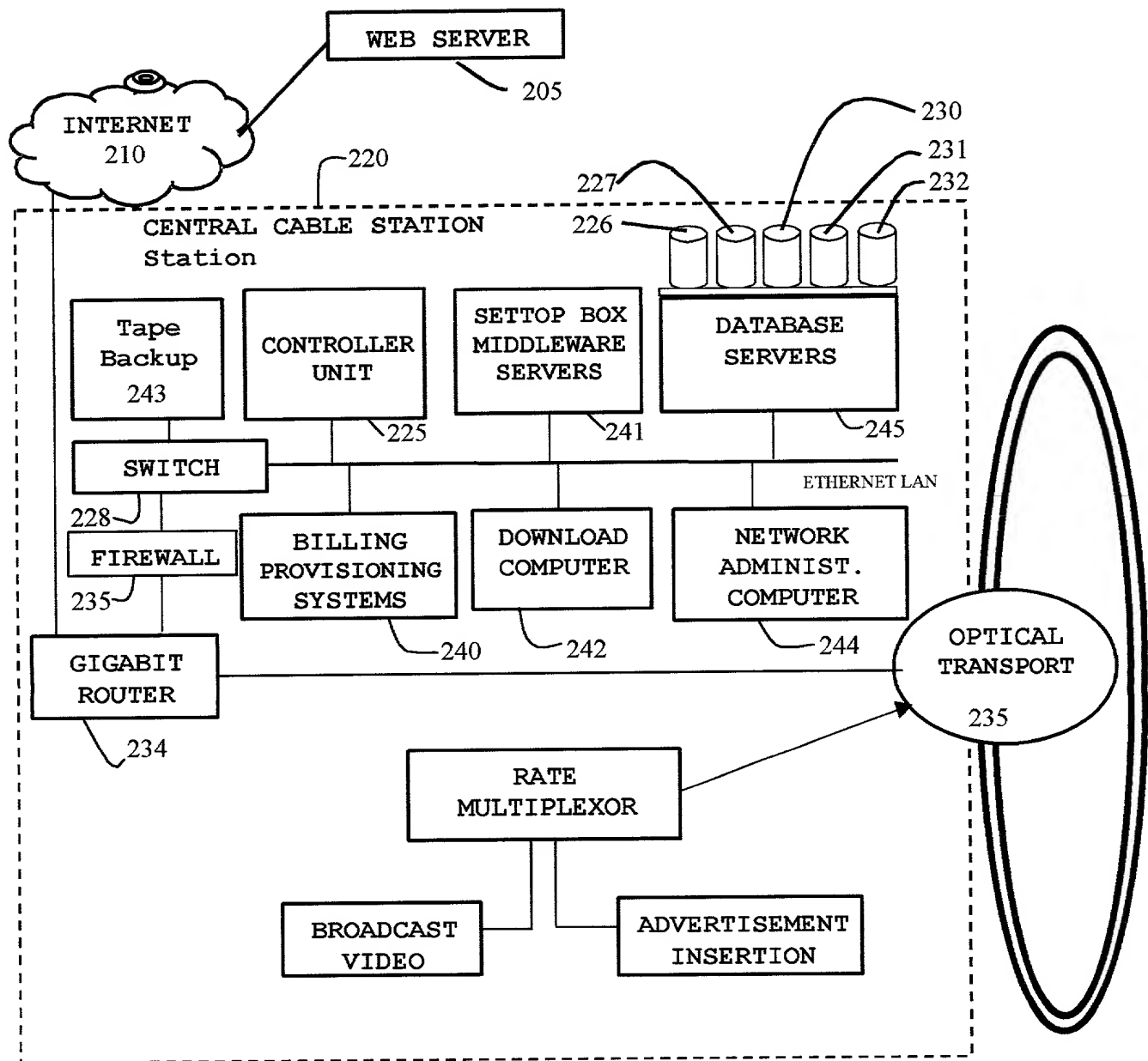


FIG. 2

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<?XML version="1.0" encoding="UTF-8"?>
<!-- This sample document describes an XML document used to distribute -->
<!-- movies to a cable subscriber audience. The content provider and the -->
<!-- network operator collaborate in the development of this document, -->
<!-- describing the terms on which the movie is distributed on the network. -->
<!-- When start of service is requested through this document, the controller -->
<!-- unit in the central cable station will process the movie as per the terms -->
<!-- described in this document. The terms indicate modes of distribution, -->
<!-- priority, time frames of validity, bandwidth and storage requirements, -->
<!-- target subscriber base, charges for viewing the movie, etc. -->
<!-- Service Property Database -->
<!DOCTYPE Video on Request "movie.dtd">
<VideoStore>
<MovieServiceName> CasaBlanca </MovieServiceName>
<MedialInfo>
  <MovieGenre MovieType="Classic"/>
  <EncodingInfo> MPEG2 </EncodingInfo>
  <FileSize> 2GB </FileSize>
</MedialInfo>
<DistributionInfo>
  <Devices DeviceType="TVSet-TopBox"/>
  <Audience AudienceType="Family"/>
  <PreRelease>
    <PreReleaseInterval>1 Week</PreReleaseInterval>
    <PreReleaseRegion="Western"/>
  </PreRelease>
  <Priority PriorityLevel = "B"/>
</DistributionInfo>
<PeriodInfo>
  <PeriodName> Summer </PeriodName>
  <TimeInfo>
    <StartDate> 06/30/2001 </StartDate>
    <EndDate> 09/30/2001 </EndDate>
  </TimeInfo>
  <ViewingValid ViewValidity="4 Days"/>
</PeriodInfo>
<PaymentInfo>
  <PayeeName> Warner Brothers </PayeeName>
  <PayerName> Subscriber </PayerName>
  <NetworkOperator NetOpSplit="45%"/>
  <Billing Info Typeof Billing="PerView"/>
  <BillingInfo ChargePerView= "4.00"/>
  <Discount WeekdayDiscount="25%"/>
</PaymentInfo>
</VideoStore>

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FIG. 3

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<?XML version="1.0" encoding="UTF-8"?>
<!-- This sample document describes an XML document used to carry Billing service -->
<!-- messages transported over a bi-directional persistent TCP/IP socket using -->
<!-- HTTP headers to Billing systems developed by other vendors. -->
<!-- The terms for Billing indicate the movie watched, time of day, amount charges -->
<!-- and the sharing ratios of the revenue between the content owner and the -->
<!-- network operator. -->
```

```
<!--Billing Messages -->
<!DOCTYPE Billing Info "billing.dtd">
<Bill Info>
<ServiceName> CasaBlanca </ServiceName>
<PeriodInfo>
  <PeriodName> Summer </PeriodName>
  <TimeInfo>
    <Date> 06/30/2001 </Date>
    <Time> 18:30 </Time>
  </TimeInfo>
</PeriodInfo>
<PaymentInfo>
  <Charge "4.00"/>
  <Payee1> Warner Brothers </Payee1>
  <Payee2> Network Operator </Payee2>
  <PayerName> Jon Smith </PayerName>
  <Account Number "12234 "/>
  <IPADDR IP=192.168.1.100/>
  <Payee1 Ratio="60%"/>
  <Payee2 Ratio="40%"/>
</PaymentInfo>
</Bill Info>
```

FIG. 3A

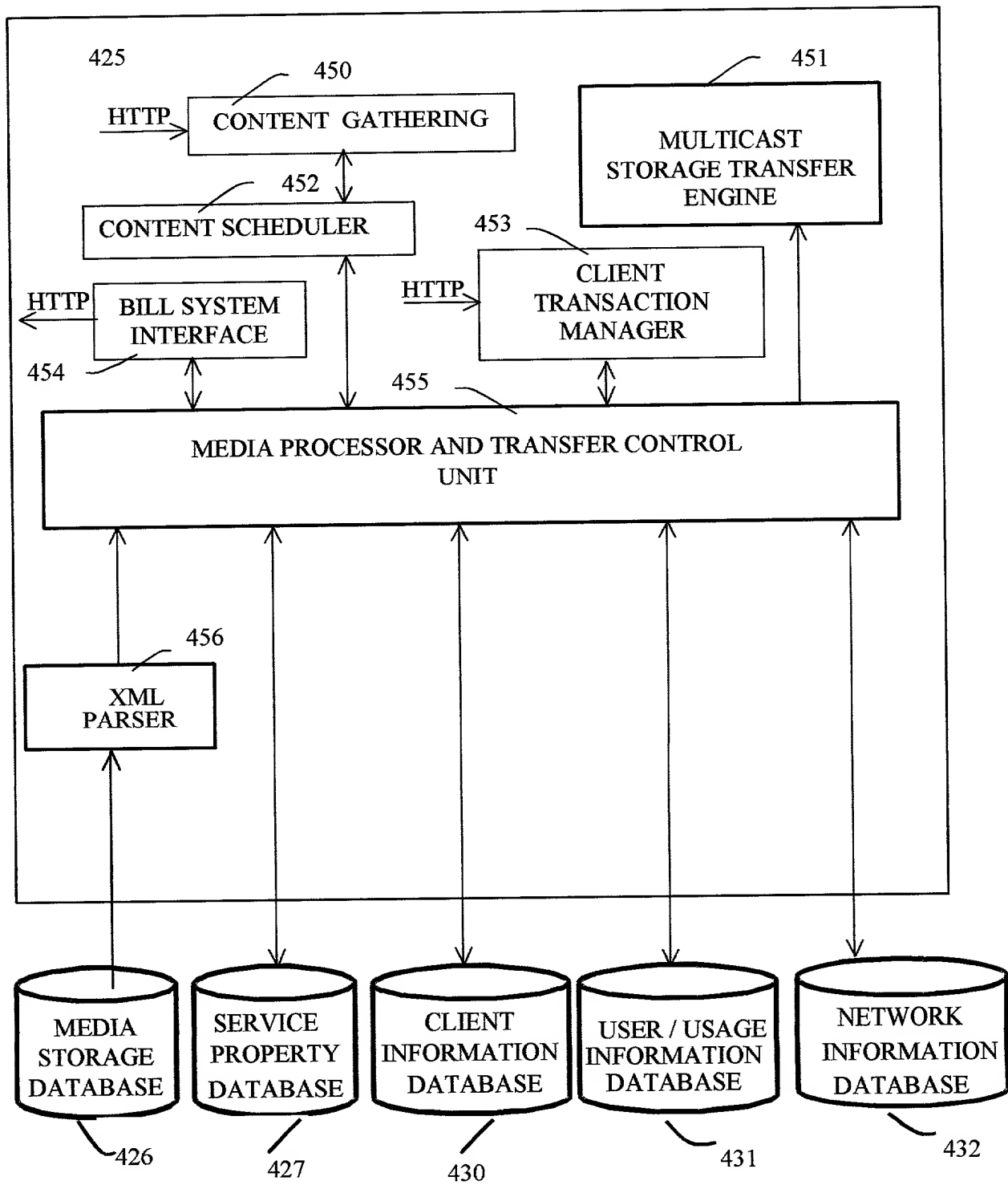


FIG. 4

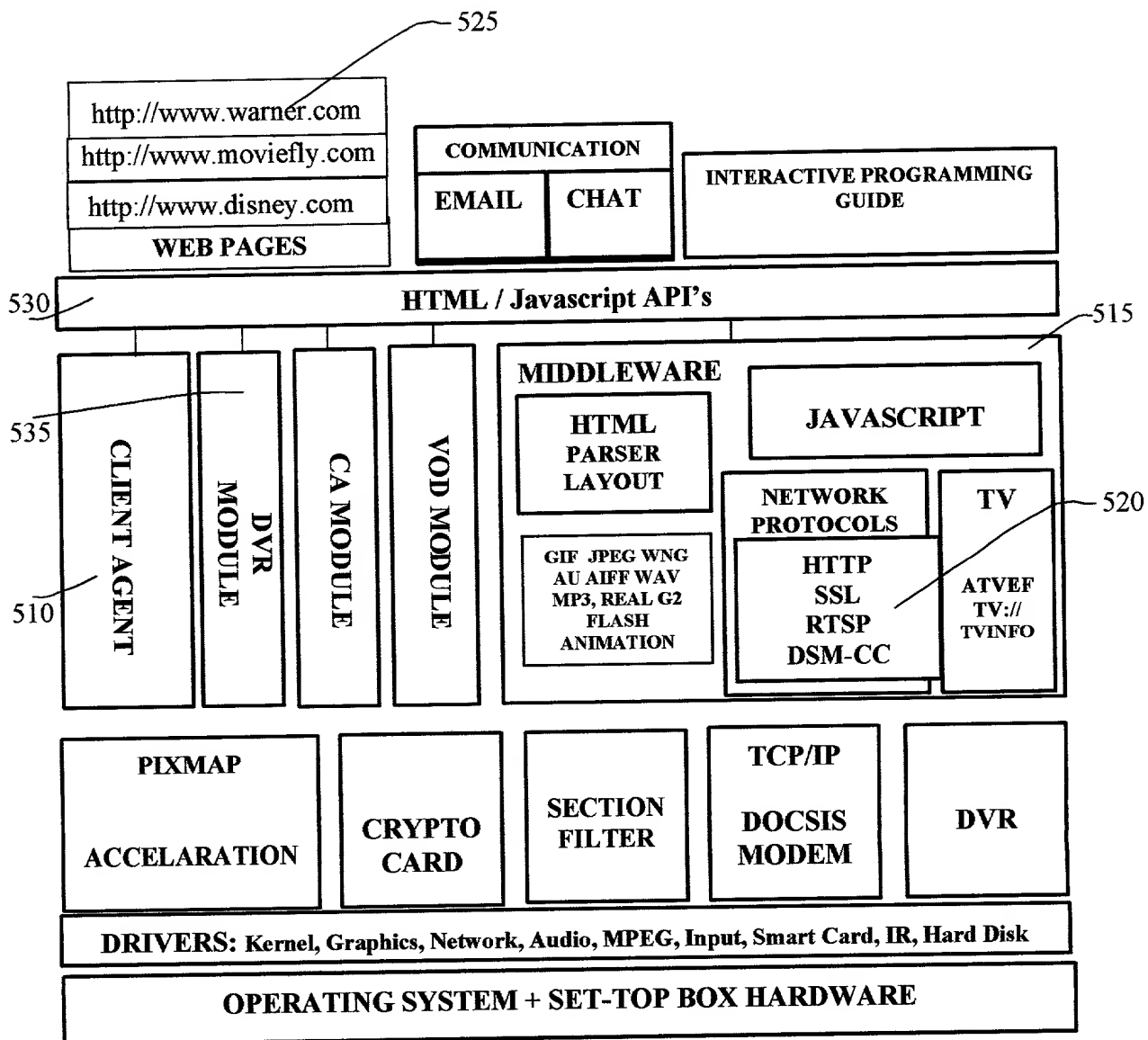


FIG. 5

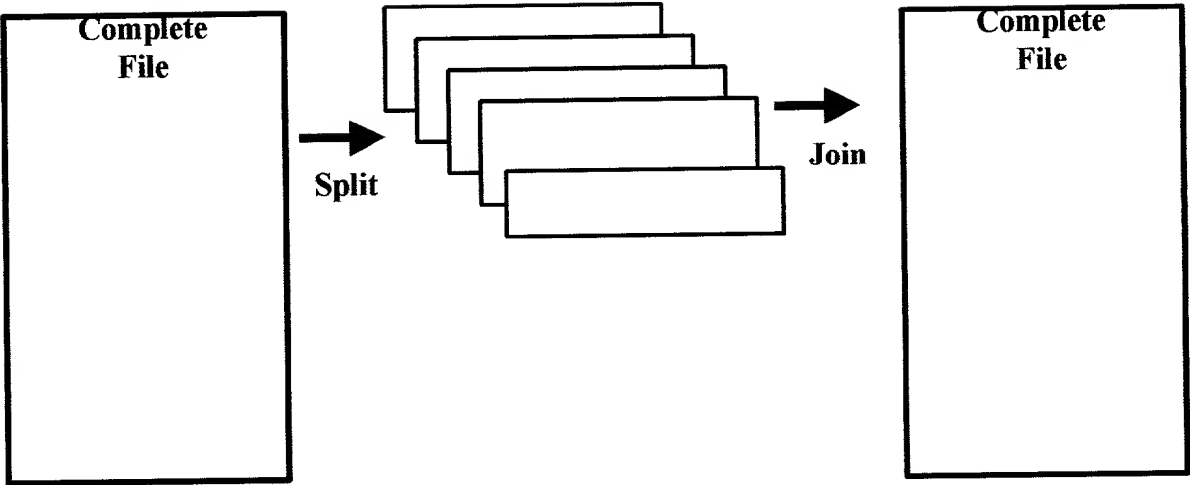


FIG. 6

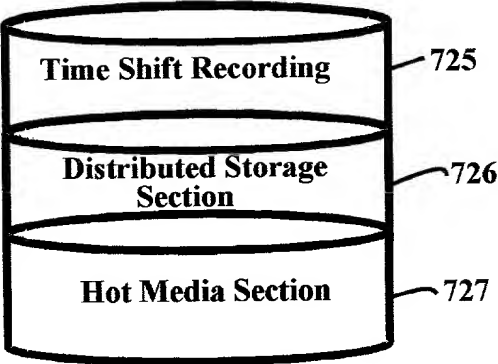


FIG. 7